

the translation. The portion of Van der Hoeven's book relating to the Protozoa was very defective, and here Dr. Clark has added some notes; but still this section is by no means satisfactory. At page 102 and the two following pages we find a good abstract of the recent investigations of Huxley, Leuckart, &c., upon the structure of the *Siphonophora*; and in pp. 109–119 numerous changes induced by these facts have been made. On pp. 135–138 the translator has introduced an account of the development of the Echinodermata, which is far more detailed than the same portion of the original work; and in describing the Entozoa (at pp. 173–176) he has given an abstract of the recent discoveries of development of those creatures, which have also caused him to omit Van der Hoeven's family of *Cystica*, now proved to consist of the developmental forms of Cestoid worms. He has, however, given descriptions of the different forms of Cystic worms at pp. 181–183. In the preface to the second volume the translator has added some further notes on the Invertebrated animals, including references to the valuable "corrections and additions" to the German translation, published in 1856 by Leuckart. From this we also learn that the author himself has made great alterations and additions to the second volume, so that, in Dr. Clark's own words, "this volume may be regarded rather as a third edition of the original than simply a translation of the second." The two volumes are illustrated with four-and-twenty plates, which are printed from the original copper-plates of the Dutch edition, and which, although some of them might doubtless be improved in appearance, will certainly prove exceedingly useful to the student.

Actinologia Britannica; a History of the British Sea-Anemones and Madreporæ. With coloured figures of all the species. By PHILIP HENRY GOSSE, F.R.S. Parts I.–IV. 8vo. London, Van Voorst, 1858.

If the present rage for Aquaria have no other result, it has certainly been instrumental in increasing the number of recorded British species of Sea-Anemones. On all our coasts *dilettanti* and naturalists are busily engaged in rummaging the rocks in search of these beautiful flowers of the sea; Actiniæ form the most prominent ornaments of the artificial rock-pools which it is the fashion now-a-days to establish in almost every house; and if the observation of the habits of these beautiful captives be carried on with anything like the same zeal, we shall soon possess a tolerably complete body of information upon their natural history.

In the meanwhile, however, it must be confessed that the importance which the Actiniæ have acquired in the eyes of aquarists is leading to its natural consequence:—under constant examination, minute characters seem to grow into greater prominence; and hence the number of genera formed threatens to increase in an astounding ratio as compared with the number of species. Thus Johnston describes twenty-seven species of Actiniadæ, which are included in half-

a-dozen genera, whilst Mr. Gosse, in his paper published in this Journal in Junelast, raises this number to forty-one, or, if we include *Capnea* and *Corynactis*, which he then placed in a different section of Polypes, to forty-four; but these will form fourteen genera in the former case, and sixteen in the latter. In the present work, again, although it has advanced but a short distance on its course, we already find indications of the tendency to further division,—as Mr. Gosse *provisionally* proposes to break up his genus *Sagartia* (including about twenty known species) into no less than five groups, for which, in the event of their being hereafter raised to a more prominent place in the system, he has wisely and providently invented generic names. If this plan be carried out much further, as indeed it is likely to be,—not perhaps by Mr. Gosse himself, but by those who are to come after him, and who, with a more inordinate desire to shine in the world, may possess far less judgment,—we shall soon arrive at that point when there will be a genus for every species; and how far this is desirable, we may leave our readers to decide. We must content ourselves with calling attention to the fact that this tendency to the multiplication of genera in the Actiniadæ is getting to a great height; for we can by no means coincide in the suicidal wish expressed by a recent writer in the ‘Proceedings of the Zoological Society’ (see ‘Annals,’ Sept. 1858, p. 231), that there should be “a council formed of five, ten, fifty, or any number of the most celebrated naturalists, and that no new species or arrangement should be published without their consent being first obtained.” If the council did their duty conscientiously, we much fear that some of this gentleman’s productions would have little chance of appearing in print. There is, however, one passage in his paper with which, as far as we can understand it, we cordially agree. He says, “The rage for marine vivaria has thrown many useless workers into the field; and I much fear that what may possibly tend to a love of nature does not always as a matter of course advance science.” Of the truth of the first of these propositions no one can entertain a doubt; the second is less intelligible.

Begging Mr. Gosse’s pardon for stopping to pay this passing compliment to one of his fellow-labourers, we must proceed to the consideration of the four Numbers of his ‘Actinologia Britannica,’ now lying before us, premising that the numbers, which appear every two months, contain thirty-two pages of letter-press and a coloured plate.

The scope of the work is sufficiently indicated by its title; and the portion already published shows that Mr. Gosse is determined to spare no pains to render it as perfect as possible. He commences with a general description of the structure of the Actiniæ, including an explanation of the somewhat elaborate terminology which he has lately proposed. The classification adopted is the same as that of the author’s ‘Marine Zoology;’ but he has introduced into the present work a new and exceedingly valuable feature, namely the characters of the foreign families and genera, which must prove very useful to the investigator of the British Actiniadæ, by furnishing him

with a clue to the position of any species of genera previously unknown on our coasts which may reward his researches. The characters of the families and genera are given in analytical tables, and afterwards in a more detailed form. The generic descriptions in those cases where the genus contains several species are followed by analytical tables of the species, and we then come to the carefully drawn-up specific descriptions, which are preceded by short characters and by a very full synonymy. The varieties of the different species are also described in considerable detail, and this descriptive portion is followed in each case by an account of the habits and natural history of the species, and a list of the localities in which it has been met with. As there are few, if any, of our British naturalists who have had the same opportunities as Mr. Gosse of studying the Sea-Anemones in their native haunts, or who possess the power of describing their observations in the same lucid and interesting style, this portion of the work is most attractive and valuable.

The species described in the four Parts before us all belong to Mr. Gosse's family *Sagartiadæ*, to which we observe he now refers the genus *Capnea*, placed by him amongst the *Caryophyllacea*, in his Synopsis lately published in this Journal. They include the genera *Actinoloba* (*A. dianthus*), *Sagartia*, with fifteen species (five or six imperfectly known species being deferred to an Appendix), and *Adamsia*.

The plates illustrating the work are, like most of Mr. Gosse's, beautifully executed; they represent the various species and many of their varieties, adhering, in different states of expansion and contraction, to the walls of their rocky home, from which the bright colours of their delicate crowns of tentacles stand out in fine contrast. Each plate contains on an average about nine figures; and their beauty, coupled with the intrinsic value and interesting nature of the work, must render it equally acceptable as an ornament to the drawing-room table and as a handbook for the scientific naturalist.

PROCEEDINGS OF LEARNED SOCIETIES.

ZOOLOGICAL SOCIETY.

April 13, 1858.—Dr. Gray, F.R.S., V.P., in the Chair.

DESCRIPTION OF A NEW GENUS OF SPONGE (XENOSPONGIA)
FROM TORRES STRAIT. BY DR. JOHN EDWARD GRAY,
F.R.S., V.P.Z.S., PRES. ENT. SOC. ETC.

The Sponge here described was received from Torres Strait with some very interesting Madrepores and Polyzoa.

It is peculiar from its being free like the *Fungiæ* among the Madrepores, but more concave beneath, from its having the upper oscules placed in the diverging forked groove of the upper surface, and from its having the whole of the under surface covered with a thick coat